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| APPLICATION NO.           | FILING DATE           | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---------------------------|-----------------------|----------------------|---------------------|-----------------|
| 09/901,430                | 07/09/2001            | Friedhelm Beckmann   | 2763/207-187        | 7357            |
| 24131 7                   | 590 06/24/2004        |                      | EXAMINER            |                 |
| LERNER AND GREENBERG, PA  |                       |                      | FONTAINE, MONICA A  |                 |
| P O BOX 2480<br>HOLLYWOOI | )<br>D, FL 33022-2480 |                      | ART UNIT            | PAPER NUMBER    |
|                           |                       |                      | 1732                |                 |

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  |   | h   |  |  |  |
|--|--|---|-----|--|--|--|
|  | Application No.  | Applicant(s)  |     |  |  |  |
|  | 09/901,430   | BECKMANN, FRIEDHELM   |     |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |     |  |  |  |
|  | Monica A Fontaine  | 1732  |     |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet w  | ith the correspondence address  |     |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).   | 36(a). In no event, however, may a r<br>within the statutory minimum of thir<br>will apply and will expire SIX (6) MON<br>cause the application to become AE | eply be timely filed<br>by (30) days will be considered timely.<br>THS from the mailing date of this communication<br>CANDONED (35 U.S.C. § 133). | on. |  |  |  |
| Status   |  |   |     |  |  |  |
| 1) Responsive to communication(s) filed on 01 Ju   | <u>ıne 2004</u> .  |   |     |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ This   | action is non-final.   |   |     |  |  |  |
|  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |     |  |  |  |
| closed in accordance with the practice under E   | x parte Quayle, 1935 C.D   | . 11, 453 O.G. 213.   |     |  |  |  |
| Disposition of Claims  |  |   |     |  |  |  |
| <ul> <li>4) ☐ Claim(s) 1-9 is/are pending in the application.</li> <li>4a) Of the above claim(s) 8 and 9 is/are withdra</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-7 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or</li> </ul>  |  |   |     |  |  |  |
| Application Papers   |  |   |     |  |  |  |
| 9) The specification is objected to by the Examine   |  |   |     |  |  |  |
| 10) The drawing(s) filed on is/are: a) acce  | · · · · · · · · · · · · · · · · · · ·  | •   |     |  |  |  |
| Applicant may not request that any objection to the one of the correction of the cor | •  | • •   | ۹/  |  |  |  |
| 11) The oath or declaration is objected to by the Ex   | ,  | • • •   | u). |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |     |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign   | priority under 35 H.S.C. &   | 119(a)-(d) or (f)   |     |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents  2. ☐ Certified copies of the priority documents  3. ☐ Copies of the certified copies of the priority application from the International Bureau  * See the attached detailed Office action for a list of   | s have been received.<br>s have been received in A<br>ity documents have been<br>(PCT Rule 17.2(a)).   | pplication No received in this National Stage   |     |  |  |  |
| Attachment(s)  |  |   |     |  |  |  |
| ) Notice of References Cited (PTO-892)   |  | ummary (PTO-413)  |     |  |  |  |
| 2)   |  | )/Mail Date<br>formal Patent Application (PTO-152)<br>  |     |  |  |  |

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## **DETAILED ACTION**

This office action is in response to the paper filed 1 May 2004.

The rejection of claims 1-7 under 35 USC 102(b) (Mares US 4275030) has been withdrawn.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mares (U.S. Patent 4,275,030). Regarding Claim 1, Mares shows that it is known to carry out a method of producing a plastic component (Abstract), which comprises placing a first material into one single shaping mold (Column 1, lines 21-29; Column 2, lines 53-59); introducing a different second material into the mold with an injection molding process when the first material has a given amount of residual heat (Column 1, lines 35-47; Column 2, lines 35-47); and bonding the first and second materials to a composite by utilizing the given amount of residual heat of the first material, producing the plastic component that is more complex than said first material (Column 1, lines 21-29, 35-47; Column 2, lines 35-47; It is noted that although Mares does not specifically disclose that residual heat of the two materials is used to bond the two together, it is inherent that said residual heat will be used during a bonding event.). Mares does not explicitly

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show using materials of two different strengths. However, he clearly teaches using two different materials (Column 1, lines 13-16). Although he uses color as the differentiating factor, he also clearly states that color is just an example of a differing property (Column 1, lines 17-20). Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to choose two different materials, specifically of different strengths or grades, for this molding operation in order to form a part having different durability in different sections. Furthermore, regarding the limitation of placing the higher-strength material in the mold prior to the placing of the lower-strength material, the advantage of this ordering it is not clear. It is hereby noted that selection of any order of mixing ingredients is prima facie obvious in the absence of new or unexpected results. *In re Gibson*, 5 USPQ 230 (CCPA 1930).

Regarding Claim 3, Mares shows the process as claimed as discussed in the rejection of Claim 1 above, including a method in which it is known to screen off a region of the mold with a slide and molding the first material in the screened-off region, and after pulling the slide and a cooling period, bonding the second material to the first material, while the first material still heat (Column 2, lines 35-51), meeting applicant's claim.

Claims 2, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mares, in view of Bertschi et al. (U.S. Patent 5,651,998).

Regarding Claim 2, Mares shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show the use of fiber material in the molding process. Bertschi et al., hereafter "Bertschi," show that it is known to carry out a method which comprises incorporating fiber materials in the materials for raising a structural strength of the plastic

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component (Column 5, lines 56-67; Column 6, lines 18-31). Bertschi and Mares are combinable because they are concerned with a similar technical field, namely, that of molding operations comprising bonding two plastics together in situ. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Bertschi's fiber material in Mares' molding process to raise the strength of the resulting article.

Regarding Claim 4, Mares shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show using a prefabricated component in his molding operation. Bertschi shows that it is known to carry out a molding method which comprises inserting a prefabricated component formed of the first material with a given amount of residual heat, and subsequently bonding the second material to the first material (Column 6, lines 18-31). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Bertschi's prefabricated component in Mares' molding process in order to raise the strength of the resulting article.

Regarding Claim 5, Mares shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show specific ribbing in his article. Bertschi shows that it is known to carry out a method of molding which comprises forming the first material as a component formed with ribbing (Figures 7 and 8). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to form Bertschi's ribbing with Mares' molding process in order to produce a part per a certain product specification which calls for ribbing.

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Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mares, in view of Hara et al. (U.S. Patent 5,277,865).

Regarding Claim 6, Mares shows the process as claimed as discussed above, but does not show forming a hollow area in the first resin. Hara et al., hereafter "Hara," show that it is know to carry out an injection molding method which comprises forming a first material as a component having a hollow portion (Column 1, line 66 - Column 2, line 11). Hara and Mares are combinable because they are concerned with a similar technical field, namely, that of injection molding operations involving thermoplastic materials. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make Hara's hollow portion in Mares' molding method in order to make Patel's molded article more stiff and lightweight (see Hara, Column 4, lines 48-53).

Regarding Claim 7, Mares shows the process as claimed as discussed above, but does not show injecting an inert gas into the first resin. Hara shows that it is known to carry out a method which comprises forming a hollow portion by injecting an inert gas into the first material when the first material is still in a plastic phase (Column 2, lines 1-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to inject Hara's gas into Mares' first resin in order to make Patel's molded article more stiff and lightweight (see Hara, Column 4, lines 48-53).

## Response to Arguments

Applicant's arguments, see the paper filed 1 May 2004, with respect to the rejection(s) of claim(s) 1 under 35 USC 102(b) have been fully considered and are persuasive. Therefore, the

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rejection has been withdrawn. However, upon further consideration, a new ground(s) of

rejection is made in view of Mares under 35 USC 103(a).

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A Fontaine whose telephone number is 571-272-1198.

The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mike Colaianni can be reached on 571-272-1196. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maf

June 16, 2004

MICHAEL P. COLAIANNI

SUPERVISORY PATENT EXAMINER